

Serial No. 10/065,036

122235

Amendments to the Specification

Please replace the paragraph beginning at page 4, line 26, with the following rewritten paragraph:

The system control 122 includes a set of modules connected together by a backplane 118. These include a CPU module 119 and a pulse generator module 121 that connects to the operator console 100 through a serial link 125. It is through this link 125 that the system control 122 receives commands from the operator that indicate the scan sequence that is to be performed. The pulse generator module 121 operates the system components to carry out the desired scan sequence. It produces data that indicate the timing, strength, and shape of the radio frequency (RF) pulses which are to be produced, and the timing of and length of the data acquisition window. The pulse generator module 121 connects to a set of gradient amplifiers 127, to indicate the timing and shape of the gradient pulses to be produced during the scan. The pulse generator module 121 also receives subject data from a physiological acquisition controller 129 that receives signals from a number of different sensors connected to a subject 200, such as ECG signals from electrodes or respiratory signals from a bellows. And finally, the pulse generator module 121 connects to a scan room interface circuit 133 which receives signals from various sensors associated with the condition of the subject 200 and the magnet system. It is also through the scan room interface circuit 133 that a positioning device 134 receives commands to move the subject 200 to the desired position for the scan.